Volume 4 | Number 1 Article 2

6-1976

Some Stories About Early Radio In The Jackson Purchase

Some Stories About Early Radio In The Jackson Purchase

Riley A. Kay

Mr. Kay:

We bought our first radio, "earphones," 1924 — later we got a big horn for it.

I remember Fibber McGee and Molly then — they told jokes — Ozzie Nelson and Harriett — they sang together — Amos and Andy, Kingfish, Lonzo, and Oscar — they were comedians. Kate Smith sang **God Bless America.** Out radio was a small one [which] sat on a table — I do not remember [the] name, [but] it may have been RCA.

Ermal Champion[1]

Many of us can recall those early days of radio, but in a few years the reality will become only record. It will be the purpose of this writer to highlight only a few of the many interesting incidents that led to the development of radio in our Jackson Purchase area as we know it today.

Radio, whether wireless telephone, wireless telegraph, or broadcast stations of AM, FM, and TV, all came to us in the span of about fifty years, from about 1890 to about 1940.

Radio in the Purchase began with Nathan B. Stubblefield, whose story is well documented in the archives of the area. The Stubblefield Story was told in an excellent manner by Dr. Ray Mofield in the 1975 edition of this **Journal.** This writer will relate stories during and after the Stubblefield era.

— — — — —

A large part of the development of early radio is attributed to experimenters like Stubblefield and to radio amateurs, known widely as "Hams." Hams must know a lot about radio technically and must pass U. S. Government examinations before receiving their "tickets" and call letters, or before going on the air. Ernest L. Baulch, a native of Fulton, Kentucky, now living in Far Hills, New Jersey, was one of the early hams in the Purchase. He recalls that he

> became interested in ham radio in 1910. In those days with kerosene lamps and no electricity in my home, I hung around the ICRR train dispatching office, listening to Morse and the signal man was my friend.[2]

By 1912 Ernie was on the air with wireless telegraph, using EB, his initials, for call letters. His transmitter was a spark coil out of a car, a home made rotary spark gap, and a pancake type loose coupler. His

receiver was tuned with a loose coupler, the detectors were galena, silicon, perikon, and electrolytic. With this equipment he received signals from Arlington, Virginia, Key West, Florida, Darien, Panama Canal Zone, Nauen, Germany, and other places. Ernie relates that he

> was well along by the time Jack Binns sent the distress call from the sinking steamer **Republic.** Then came the sinking of the **Titanic** and lots of interest developed in wireless . . . . The church people decided I should not become an agent of the devil, so they appointed a committee to investigate my transmitting messages through the air, which was certainly a business of old satan! I set up a receiver in the home of Mr. L. N. Howard in West Fulton and we sent a selected message in the presence of the chairman of the committee from my home to Mr. Howard's. It was a verse from the Bible! That cleared me so I could continue my ham operations . . . . Mr. John F. Dillon, the radio inspector in Chicago, and I got together and I quit signing my station as EB and was officially 9HR in 1914 . . . . Kenneth B. Warner, 9JT in Cairo, Illinois, worked out a relay system from Ralph Matthews, 9IK in Chicago. to Harmon B. Deal, 9NN in Cape Girardeau, to Warner, 9JT in Cairo. I was to try to get from 9HR to Dyersburg, Tennessee, then on to Memphis and Little Rock, Arkansas . . . . I went to the University of Kentucky, then in 1920 to Western Electric in New York, and later to the Bell Laboratories in New Jersey. I now operate W2TX in Far Hills, New Jersey, and the tradition is being carried on by my daughter, Marcia, as WA2AKJ.

Hickman, Kentucky, can boast one of the earliest hams in the Purchase, Mr. Charles King Davis, licensed in 1920 with call letters 9GG.[3] Later his call letters became W9GON (in 1929), W4FZL (in 1946), and later in 1946 W4GZ under which he operates today. In 1920, 9GG made a transmitter out of a Ford spark coil, then later wound a one-half kilowatt spark coil and made his own ratary spark gap. Then he purchased a "full gallon" (one kilowatt) transformer and was really "on the air." Now W4GZ is modern and operates on all ham bands and two meters in particular.

Paducah and McCracken County can boast many hams. Mr. H. Herman Schneidman, now operating his station K4CQB from the top floor of the Jackson House in Paducah, says he started radio when he was nine years old, by building a code buzzer and learning the code.[4] He was a ham "bootlegger" before 1924 using homemade code transmitter and receiver. In 1924 he obtained his first amateur license, 9APP, and was soon transmitting both code and voice. His transmitter was a Hartley oscillator with a telephone transmitter in the ground circuit for transmitting voice.

Raymond Moss received his first license and call letters W9CHL on December 16, 1926.[5] After World War II his call letters were changed to

W4CHL under which he currently operates at his home in Salem, Kentucky. Ray tells a story very interesting to old time hams:

> I made my tank condenser from aluminum cookie sheets and pie pans. I put my electrolytic rectifiers in jelly glasses and made a 1000 volt power transformer by rewinding a pole transformer. I wound my own chokes. For a receiver I made a loose coupler and used crystal detectors. Later, I bought a "Super Wasp" and a Bremer-Tully receiver.

Warren Middleton obtained his ham license and call letters, W9CXD, about 1930 and has been on the air since that time.[6] His present call letters are W4JUT. One of his first stations consisted of a Heising modulated Hi-C Harley oscillator for a transmitter and a home made receiver. Warren is currently active in the Paducah Amateur Radio Club, in MARS (Military Amateur Radio Service), and on two meters.

John Martin received his ticket and call letters W9NEP in 1933.[7] His early transmitter consisted of a pair of Type 210 tubes in a TNT oscillator. His receiver was homemade. John became very active in the Paducah Amateur Radio Club in the late nineteen thirties. He is still on the air at his home on Buchner Lane and his present call letters are W4WQ.

Another of the earliest devotees of radio was Roy Katterjohn, who announced in 1919 that he was "getting music out of the air."[8]

— — — — —

"Howdy, Folks. This is radio station WIAR, Paducah, Kentucky!"

Radio station WIAR began broadcasting in late 1920.[9] It was owned by J. A. Rudy and Sons Department Store, and broadcast on a wavelength of 360 meters (833 kc). Initially the station operated with a power of fifty watts but later increased power to one hundred and fifty watts. The studio and transmitter were operated in the same room on the top floor of the store building and a four-wire flat-top antenna hung from that roof to the roof of a nearby building a few hundred feet away. A telephone was used for the microphone and the walls were covered with World War I blankets to quieten down the studio. The main program material was phonograph records and the nightly appearances of Hillman's Band, a five piece Negro dance band.

In the latter part of 1921, Mr. Edwin J. Paxton, owner and editor of the Paducah **Evening Sun,** purchased the station from Rudy's Department Store and moved it to the roof of the **Evening Sun** building.[10] The station license was issued at that time by the U. S. Department of Commerce and called for a power of one hundred watts. Program material was mostly records played on an orthophonic Victrola, an Ampico player piano, and amateur talent. Irving S. Cobb made his first ap-

pearance on radio over station WIAR, and in 1922 Alben Barkley gave his first radio speech over station WIAR. Edwin J. Paxton, Jr., relates that

> One of the funniest programs Dad ever put on radio was when he brought in several colored janitors from the **Evening Sun,** gave each a bag of nickels, some dice, spread a blanket on the floor, set a microphone in the middle of the blanket, and told the boys to have a craps game! He sure couldn't have gotten away with that now . . . Dad sold the station after a couple of years to a milling company in Hopkinsville and the call letters were changed to WFIW, for Wildest Flowers In World.

— — — — —

Perhaps one word best describes the early days of radio broadcasting in the Purchase: Hectic!

As with every new business enterprise, success depends upon the cash input. To get some store to pay cold cash to have a announcer say, "Buy your soda crackers at Cassell's Store," was an entirely new idea back in the early thirties, and the idea itself took plenty of selling. The broadcast had to have entertainment to get people to listen. For a long time local talent was the answer: singers (by the dozen), dance bands, square dance bands, horn players, piano players, etc., and particularly local artists with large followings, which meant relatives and friends. Soon the novelty of broadcasting local talent wore off. Musicians' unions were formed and amateurs became professionals. Phonograph records and player pianos were "in" for several years but by the late nineteen thirties broadcasters were required to pay royalities for the use of records and other mechanical music.

Then came the networks: NBC-Red, NBC-Blue, CBS, Mutual, etc. Now programs originated in big cities, such as New York, Chicago, and Los Angeles, and were "piped" all over the nation. Local broadcasters could "hook up" to a network for the entertainment and intersperse local advertisements or commercials as he desired. But all of this cost money, more money, which had to come from the local business man, and in turn from the housewife buying cheese and crackers.

After World War II, the big boom came through national advertising, where products that could be sold on a nation wide basis could support the broadcasting networks, and money began to flow from the networks to the local broadcaster.

Perhaps the most stable entertainment through it all has been sporting events — "sportscasting." Back in the nineteen thirties sporting events drew large listening audiences and today the television sports audience is probably the largest in the world.

The demand for radio broadcasting brought a demand for better radios. Amateurs and experimenters became engineers and production managers in radio factories and laboratories. They began all out efforts to improve radio receivers by making them easier to operate, with better listening qualities, and above all cheaper so that every household could have a radio in every room. Radio has come a long way from crystal sets to battery sets with horrible leaky storage batteries, to living room monsters, to our present composite and wrist watch type radios. It all started with the members of a family sitting around in the living room, each person with his own earphone, listening for a couple of hours each night trying to pick up stations from all over the U.S.A. Today we have table top combinations in every room and the young folks carry pocket radios wherever they go.

WPAD in Paducah became the first commercial broadcast station in the Purchase on August 23, 1930.[11] WPAD's first program was broadcast from twin towers overlooking Broadway from the top of the Ritz Hotel. The frequency used at that time was 1420 kc and the power was one hundred watts.

> Early listeners will remember such personalities as Billy Bird, engineer. A few years later the power was increased to two hundred and fifty watts during daytime hours to enable WPAD to serve the rural areas. In those later times well known staff members were J. T. Campbell, C. G. (Preacher) Simms, and a bit later Fred Stone, followed by the late Gene Peak.[12]

Shortly after the Flood of 1937, WPAD put in use one of the first relay broadcast units in the state. Licensed under the call letters WAHL and mounted in a white Buick, the portable radio station became a familiar sight to Paducahans. A group of original broadcasts was made that year, including spot programs from a locomotive, a boat, and an airplane.

In 1941 WPAD changed its operating frequency to the present 1450 kc and its nighttime power to two hundred and fifty watts. In 1943 it joined the Columbia Broadcasting System in order to bring to its listeners the finest in network programs. And in 1946 WPAD added FM to its operations. In 1948 the present site was obtained, a new studio — transmitter building was constructed, and a vertical radiator (antenna) built.

> A veteran WPAD staffer is Ray Mofield who joined the organization in 1945 and calmly survived the transition from staff announcer to his present [1950] post of Assistant Manager. Ray is best known for his love of and work with sports in this area and his style, that of one who plays the game from the broadcast booth rather than disinterestedly watching it.[13]

In 1950 the Radio Research Group of Murray State College, under the direction of Marvin Wrather, Director of Public Relations, prepared the **FM and Audience Survey,** from statistics and data compiled and gathered by Ray Mofield. The main objective was to determine the number of FM radio homes in the main college service area of Kentucky, Tennessee, Illinois, and Missouri. A summarizing statement in this survey says that

> Loyal listeners make stations WPAD AM and FM mighty proud of the 72,612 families in our 23 counties, who told Murray State College researchers that they listen an average of 2.9 hours per day to the duplicated programs on the stations . . . We're still producing public interest shows of the caliber that won us the NAB Award for work done during the 1937 flood . . . The listeners are happy about our 21 years of progress. So are the advertisers.

WPAD was promoted and put on the air by Pierce E. Lackey, who later founded the Paducah Broadcasting Company. Mr. Lackey was President of both organizations. Later he was joined by his brother W. Prewitt Lackey, who became Vice President and Station Director.

The present owner of WPAD is Edward B. Fritts and the present location of the station is at 1700 N. 8th St., Paducah, Kentucky.

WCBL in Benton, Kentucky, came on the air at noon December 13, 1954, playing the well known hymn "Will There Be Any Stars In My Crown?"[14] This climaxed many years of experience in the broadcast business for Shelby McCallum, the original and present owner of the station. WCBL-AM operates on a frequency of 1290 kc with a power of 5000 watts, and WCBL-FM broadcasts at 102.3 megacycles with a power of 3000 watts. The station includes both AM and FM transmitters, a reception room, and studios and offices. One portable transmitter is available for local pickups such as sporting events, parades, and the annual "Tater Day." Mr. McCallum says

> Programming has to be very flexible. We started with hour long dramatic plays, now we use fast moving spot-stype program material. In the fifties we used a lot of country music, then for several years we used the Top 40 programs. Then the polls began to show the popularity of country music again, so, on July 4th a couple of years ago we announced that WCBL would be all country again. At first our country music came from our own studio, where we broadcast local hill-billy bands with hour long programs. Now we use a lot of records, purchased for broadcast, and make taped programs where we can cue in any announcement or commercials we desire.

Mr. McCallum is a native of the Jackson Purchase and served in the Kentucky State Legislature for eighteen years as representative of

the Sixth District.[15] On Friday evening, December 12, 1975, a dinner was held in Gilbertsville, Kentucky, in honor of and celebrating the twenty-first birthday of radio station WCBL.

— — — — —

Perhaps the title of "Mr. Radio" of the Jackson Purchase should be conferred upon Dr. Ray Mofield of Murray State University. Dr. Mofield's career in radio began in August 1945, after the end of World War II, when he signed on at WPAD in Paducah. In a very short time, Ray learned the ropes of radio and, more importantly, how to prepare applications for construction permits and broadcast station license applications in a way that would be approved by the Federal Communications Commission, which is a real achievement.

Ray's services have contributed immeasurably to getting many stations in the Purchase on the air.[16] Among these are WPAD Paducah and WPAD-FM, the oldest continuously operating FM station in Kentucky (on the air since November 26, 1946); WFMW Madisonville, Kentucky; WRAJ Anna, Illinois; WNVF Nicholasville, Kentucky; WCBL Benton, Kentucky (December 13, 1954); WCBL-FM (March 3, 1969); WABD (Air Borne Division) Fort Campbell, Kentucky (August 1969); WKTM (West Kentucky's Tobacco Market) Mayfield, Kentucky (summer of 1946, but moved to Portageville, Missouri, September 1, 1960): WKTM-FM (license applied for the week of January 15, 1976); a station in Ripley, Tennessee; WNBS (Nathan B. Stubblefield) Murray, Kentucky (July 1948); and WKMS (West Kentucky — Murray State on May 11, 1970).

Some of Ray's experiences make interesting stories in themselves, for example, the Mayfield story.

At the close of World War II the Federal Communications Commission liberalized its policy and decided to issue as many licenses to a community as engineering considerations (frequencies) would allow, regardless of the size of the community. Three groups of investors organized in Mayfield, applied for licenses, and, surprisingly, three licenses were granted: WMOK at 920 kc, WKTM at 1050 kc, and WNGO at 1320 kc. Pierce Lackey, owner of WPAD, was interested in WKTM. He sent Ray Mofield and engineer "Doc" Morris to Mayfield to get WKTM on the air as quickly as possible. Dr. Mofield says

> We bought a Gates transmitter and a wind-charger tower, went after both in our truck, had a local contractor pour a slab near Fancy Farm and Kentucky highway 80, rented a tent from a tent and awning company in Nashville, and were on the air in three weeks. That three weeks still stands as some sort of record for a broadcast station construction period. We broadcast all summer 1946 from that tent, hot and dusty, and had a lot of "man on the street" programs in Mayfield.[17]

The investors in WMOK decided that three stations in Mayfield were too many, and therefore obtained permission from the FCC to establish the station in Metropolis, Illinois.

About six months after WKTM began broadcasting, WNGO came on the air. It was under the management of Reverend Southern, a Baptist minister, and broadcast mostly religious programs. Later Charles Stratton purchased both WNGO and WKTM, then sold WKTM to Shelby McCallum of Benton, who moved the station to Portageville, Missouri.

Another interesting story from Dr. Mofield concerns Murray and WNBS, with calls honoring Nathan B. Stubblefield.

In 1947, eleven investors in Murray decided to form a broadcasting company and asked Ray Mofield to "manage the station, apply to the FCC for a construction permit and license, buy equipment, and get on the air." At the same time, a group in Paris, Tennessee, had applied for a station on the same frequency, 1340 kc. The FCC called for a hearing to be held in Murray. Ray was required to prepare evidence, obtain witnesses, and testify. At that time, one of the FCC's "twelve yardsticks" was to give preference to communities with no radio service. Since Paris, Tennessee, already had a broadcast station, the license for WNBS was granted to Murray. By the time the hearing was over, the Murray investors had become a little uneasy and hired a well known broadcast attorney, Neville Miller, to check the procedures under way. Mr. Miller verified that everything was "OK," but at a cost of $1000 per day for his services. WNBS began broadcasting in July 1948 on 1340 kc. In 1957 Charles Shuffett and C. H. "Pete" Hulse purchased WNBS and licensed it to the Service Broadcasting Company. Frequency Modulation (FM) was added to the station in June 1967 with call letters WAAW. In 1975 the stations were sold to Timkay, Inc., and began operating under the new ownership on September 1, 1975. WNBS operates on a frequency of 1340 kc with a power of 1000 watts and WAAW-FM is on a frequency of 103.7 megacycles with a power of 100,000 watts. WAAW is the most powerful station in the Purchase.

The WKMS-FM station at Murray State University may also be attributed to Dr. Mofield's foresight. Shortly after he joined the faculty at Murray State, he approached University President Dr. Ralph Woods with the idea that a lower power FM station would be an asset to the University's Communications curricula. About the same time the Kentucky Educational Television (KET) network wanted a television outlet in the Purchase. A site was located near Farmington, the highest above sea level in the area, it was purchased by the Ashland Oil Company, then donted by Ashland to KET. An agreement was reached with KET that Murray State University would install the station and tower, would operate it by remote control, and in return would be permitted to install an FM antenna to the tower and operate WKMS-FM radio in conjunction with KET. Thus WKMS came on the air on May 11, 1970, and has become well known throughout the Purchase for its high quality daily broadcasts, especially of National Public Radio (NPR) network programs.

By the middle of the nineteen thirties another constroversy arose in the field of radio, namely, frequency modulation. On November 6, 1935, Major Edwin H. Armstrong demonstrated a frequency modulation system using a two and one-half meter wave. Scientists in a major communications organization proved mathematically "beyond doubt" that frequency modulation was impossible. Later, after frequency modulation became a reality both physically and commercially, a younger scientist in that same organizaion located the "fallacy" in the original calculations.

By this time a well recognized weakness in the "standard broadcast band" was limiting the usefulness of AM broadcasting, that weakness being night time interference from distant broadcasting stations. To reduce this problem, lower frequency broadcast stations were forced into "clear channel" operations while higher frequency stations were limited in the power they could use. The number of clear channels was small.

Broadcast stations in the Purchase appealed largely to rural listeners and with the low power limitation it became difficult to reach listeners as far as one hundred miles away, particularly at night when most listeners could use their radios. Frequency modulation was the answer. With moderate power it was possible to reach the rural areas day and night without interference from distant stations. Most of the broadcast stations in the area applied for and were granted licenses for both AM and FM operations. Thus the Purchase became known as the "FM Capitol of the World."[18]

— — — — —

Perhaps the most dramatic proof of the importance of radio in the Purchase area came during the Great Flood of 1937. If all of the individual incidents could be told a book of several hundred pages could be written. Power lines were shorted out, roads were blocked, telephone service was all but nil, but the combined efforts of WPAD and several radio amateurs brought boats, trucks, and supplies to hundreds of stranded families in the Purchase.

> 1937 was the year of the flood in Paducah and WPAD, by ingenuity and effort, managed to continue broadcasting from the 9th St. location until the Ohio River moved into the first floor. Then, with the cooperation of U.S. Engineers, the entire station was moved to a garage in Avondale Heights, where it continued to operate throughout the rest of the disaster. WPAD and Paducah's hams joined hands in a communications network that was for months Paducah's only reliable method of communication.[19]

The following is taken directly from WPAD's Station Log during the crisis period:

> WPAD shut down 2:30 p.m. Jan. 22, 1937, because of first power failure and moved to two story building in rear. Red

Cross failed to provide wire and we did not get back on air til midnite (Sunday night) 1/24/37. Took families to Avondale Jan. 25. River stage 57.8. Signed off and moved to Dad's garage in Avondale. On Monday, Jan. 31st river stage 60.6. Moved eqpt out 2nd floor east window. Was moved by U.S.E.D. Eqpt was unloaded from boat at 29th & Jefferson St. Back on air Feb. 1st. Moved back to quarters March 2nd 1937.

The April 1937 issue of **QST,** a magazine devoted entirely to Amateur Radio, contained an eighteen page article entitled "In the Public Interest, Convenience, and Necessity," written by Clinton B. DeVoto, which told the story of the part amateur radio played in providing emergency communications during the Ohio River Flood. We quote from this article:

> The Ohio River, they say, is a thousand miles long. For more than half of its length it provides the northern boundary of the sovereign State of Kentucky. Kentuckians often believe that no good can come from the North. Last January they may have had reason for the thought, for in their half, the Ohio roused to a peak fury — leaving more than 300,000 homeless, hundreds dead, and property damage of many millions . . . Many of Paducah's 40,000 inhabitants can reasonably be claimed to owe their lives to amateur radio, more specifically to R. O. Moss W9CHL [now W4CHL living in Salem, Kentucky], who in an initial 120 hour continuous watch without rest, was principally instrumental in securing the men and boats who evacuated much of the population after high water covered the town; a thousand of whom were still trapped in hotels and homes as the crest approached. Working with nine 160 meter amateur stations, the National Guard, the Coast Guard, and WPAD, the local broadcast station, W9CHL handled 1552 messages, had a crew of 25 making deliveries by automobile, boat — any way possible . . . Some 90 hours after W9CHL's initial QRR [amateur radio call for help], H. Warren Middleton W9CXD (a State official) and John H. Martin W9NEP got going on 1900 kc in the Irving Cobb Hotel, at the request of the Red Cross. Working with the Red Cross and WPAD, and with the help of H. Herman Schneidman W9APP and Robley Williams, Middleton and Martin handled 560 messages, most of which were broadcast over WPAD.[20]

WPAD worked out a network with WSM in Nashville and WHAS in Louisville and relayed many security messages between families and friends in and out of flooded areas.

— — — — —

Although the military use of radio, both radio telegraph and radio telephone, began with World War I, the use of radio by state and local police came in the late nineteen thirties. State Police radio systems had

been established in all forty-eight states by the time we were involved in World War II. During that War, War Emergency Radio Service (WERS) networks were set up in most of our major cities and their metropolitan areas. Amateurs, who were off the air for the duration, built the equipment for these networks and both amateurs and civilians were licensed to operate them. This activity proved the usefulness of radio to municipalities.

The electronic age that followed World War II brought the technology which lowered the cost of radio equipment to within the range of county and municipal organizations. Now, county sheriffs, city police, fire departments, and all emergency facilities are well equipped with two-way radio systems.

Mr. Charles King Davis of Hickman, Kentucky, says that he

put in the first two-way police radio in Hickman about 1959 while I was mayor. The FCC had turned the old eleven meter ham band over to citizens band (CB) and I got hold of a couple of Gonset rigs. I used one as a base station and put the other in a squad car. We didn't have too much success because of the hills and hollows here in Hickman but at least we showed that the police should have radio. About 1966 our Police Department obtained commercial radio equipment and now we are well equipped with police radio.[21]

Mr. Troy Clark, of Paducah, says that he

had a lot to do with early police radio in Paducah. We asked for bids on November 27, 1941, and early in 1942 purchased a fifty-watt table model transmitter and a receiver for two of our squad cars. We were in the two-to-four megacycle band and our gear was made by Motorola. Our station call letters were WQNP. May 5, 1959, we installed an RCA cabinet model one hundred watt transmitter at the station and five receivers in squad cars plus two two-way radios in other squad cars. We had a nine-foot antenna on top of an eighty-foot tower located on the roof of a three-story building.[22]

— — — — —

Ships at sea began using ship to ship and ship to shore wireless telegraph and wireless telephone at the turn of the century, but it was not until the mid-thirties that marine use of radio telephone reached our area.[23] Ocean going vessels and those traveling more than three miles from shore on the Great Lakes had been required to have wireless sets and wireless operators on duty around the clock since the sinking of the **Titanic** in 1912. By 1937 radio telephone sets could be rented or purchased outright for use on the inland waters. These became particularly useful to barge tows and river passenger boats on the Tennessee, Ohio,

and Mississippi Rivers bounding the Purchase. Captains could keep in touch with each other, with home ports, with the Coast Guard if an emergency arose, and particularly with lock masters scheduling passage through river locks.

E. E. Wagner, Captain of the **Delta Queen**, writes that he

> was very happy to receive your letter of October 27 showing your interest in the boat and our radio. I can give you some information on our unit but don't know how helpful I can be to you. Our radio-telephone has been on here for some time. There are marine operators up and down the rivers at various ports which allows us to be in contact for ship to shore calls at almost any time. Basically we use the unit for service calls as we cruise underway. Because of our large passenger load, we don't offer the radio telephone service openly, but in emergency we do allow our passengers to use it . . . I can't recall offhand any single incident that sticks out in my mind about the radio except maybe the time one of my pilots talked too long on the air. When the FCC official met us at the lock later with a citation for this pilot, the pilot denied that he talked too long. The FCC man quickly pulled out a tape recorder and had the whole conversation on tape. It was then that the pilot admitted his mistake. Fortunately the matter was then resolved.[24]

Today, even privately owned pleasure craft can keep in touch with each other, talk to lock masters, talk to the U.S. Coast Guard, talk to anyone in the United States and some foreign countries by way of direct hookups with regular telephone service from anywhere on our Purchase area lakes and rivers. Two groups of frequencies are available to radio telephones: the two-to-three megacycle system and the VHF-FM (156-174 mHz) system.

1. Letter from Ermal Champion, Paducah, Ky. to R. A. Kay, 12 July 1975.
2. Letter from Ernest L. Baulch, Far Hills, N. J., to R. A. Kay, 6 November 1975.
3. Interview with Charles King Davis, Hickman, Ky., 3 October 1975.
4. Interview with H. Herman Schneidman, Paducah, Ky., 6 October 1975.
5. Telephone conversation on 22 December 1975 and QSO (80 meters) on 23 December 1975 with Raymond Moss, Salem, Ky.
6. Interview with Warren Middleton, Paducah, Ky., 6 October 1975.
7. Interview with John Martin, Paducah, Ky., 6 October 1975.
8. Neuman, **The Story of Paducah, Ky.** In Paducah Public Library.
9. Schneidman Interview, above.
10. Interview with E. J. Paxton, Jr., editor of Paducah **Sun-Democrat,** Paducah, Ky., 12 November 1975.
11. Publications: "25th Anniversary of Paducah's Community Station WPAD AM and FM," and "1950 Survey of AM-FM Coverage," and interview with Edward B. Fritts, owner of WPAD AM-FM, 6 October 1975.
12. **ibid.**
13. **ibid.**
14. Interview with Shelby McCallum, Benton, Ky., 6 January 1976.
15. **Tribune-Courier,** Benton, Ky., 17 December 1975.
16. Tape recorded interview with Dr. Ray Mofield, Murray State University, 23 January 1976.
17. **ibid.**
18. McCallum Interview, above.
19. WPAD publications and Fritts Interview, above.
20. **QST,** April 1937.
21. Davis Interview, above.
22. Interview with Troy Clark, Paducah, Ky., 8 October 1975.
23. History of Communications — Electronics in the United States Navy.
24. Letter from E. E. Wagner, Capain of the **Delta Queen,** to R. A. Kay, 1 November 1975.